UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.
09/183,375	10/30/98	SZEBENI	J	003/098/SAP

HM22/0313

THOMAS G. WISEMAN
MORRISON & FORESTER LLP
2000 PENNSYLVANIA AVENUE, N.W.
WASHINGTON DC 20006-1888

EXAMINER	
KISHORE, G	
ART UNIT	PAPER NUMBER
1615	14

DATE MAILED: 03/13/01

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 1-8-01 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), ____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☐ Notice of References Cited by Examiner, PTO-892.
2. ☐ Notice of Draftsman's Patent Drawing Review, PTO-948.
3. ☒ Notice of Art Cited by Applicant, PTO-1449.
4. ☐ Notice of Informal Patent Application, PTO-152.
5. ☐ Information on How to Effect Drawing Changes, PTO-1474.
6. ☐ _____.

Part II SUMMARY OF ACTION

1. ☒ Claims 1-19 are pending in the application.
   Of the above, claims 7-9, 11 & 18-19 are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 1-6, 10 & 12-17 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____. has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____ ; filed on _____.
13. ☐ Since this application apppears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

DETAILED ACTION

The request for the extension of time and amendment filed on 1-8-01 are acknowledged.

Claims included in the prosecution are 1-6, 10 and 12-17.

Claim Rejections - 35 U.S.C. § 112

1. **The following is a quotation of the second paragraph of 35 U.S.C. 112:**

> **The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.**

2. **Claims 1-6, 10 and 12-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

It is unclear is whether the hypersensitivity is because of the drug, solvent or the amphipathic molecule as recited in claims 1 and 12. The amendment made did not clarify this issue.

'including' now added in claims 6, 15 and 17 is indefinite; the examiner had already suggested 'comprising' instead.

What is being conveyed by 'emulsifiers or detergent molecules' in claim 2? First of all, polyethoxylated oil itself is an emulsifier; secondly, applicant also recites 'derivatives' separately and that term includes even emulsifiers. Applicant's amendment deleting just

'thereof' does not fully address the issue because as pointed out before, the specific compound recited itself comes under the category of an emulsifier and detergent.

Applicant deletes 'solvent' from claim 1 and thus, solvent in claim 3 lacks an antecedent basis.

The distinction between cremophor and cremophor EL as recited in claim 4 is unclear. Chemical names should be recited.

The examiner suggests the deletion of 'products'. This rejection is maintained since the term, products still remains in the claim. Products is not a proper expression when reciting specific compounds.

'slowly' in claim 10 is a relative term. This rejection is maintained since applicant has not addressed this issue.

What is meant by 'particulate biomaterials' which is recited as carrier in claim 14; this rejection is maintained since applicant has not addressed this issue.

Claim Rejections - 35 U.S.C. § 103

3. **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

> **(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.**

4. **Claims 1-6, 10 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ko (5,851,528) by itself or in combination with De Lacharriere (5,744,156).**

Ko discloses a method of inhibiting complement activation by administering complement activation inhibitors. The method involves the administration of the inhibitor in controlled release delivery devices such as liposomes. The method is used for various conditions including the drug induced allergies and inflammation (note the abstract, col. 3, lines 49-52, col. 5, lines 32-51, col. 11, lines 1-42, examples and claims). Although Ko does not specifically teach the administration of the inhibitor together with the drug, it would have been obvious to one of ordinary skill in the art to administer together since Ko is suggestive of this combination from his statements on col. 10, line 42 et seq., according to which the inhibitor "can be combined with appropriate pharmaceutical formulation. An artisan would be motivated further to administer the drug or an agent which causes the side effects along with the inhibitor since the reference of De Lacharriere teaches such a concept; according to De Lacharriere hydroxy acids which cause side effects and the substance P antagonist which prevent these side effects are administered together. The criticality of cremophor (an amphiphilic compound) is unclear in the absence of unexpected results.

Applicant's arguments have been fully considered, but are not found to be persuasive. Applicant argues that Ko teaches chimeric molecules which inhibit compliment

activation and these proteins are taught to reduce the inflammation and that the conditions mentioned include those associated with ischemia-reperfusion, crash injury etc. Applicant is incorrect; Ko in Table I on col. 11 teaches drug allergy and this comes under the term, 'hypersensitivity'. The prior art of Obrien (Annals of Oncology, 1992) submitted by applicant himself classifies drug allergy as 'hypersensitivity'. With regard to applicant's arguments that De Lacharriere does not teach hypersensitivity associated with complement activation by amphiphilic molecules, the examiner points out that instant claims do not clearly recite that the amphiphilic molecule is responsible for the side effects. The claims as recited read on entire composition causing the side effects. Even assuming that the side effects are only due to the amphiphilic molecule, De Lacharriere is combined to show that administration of compositions causing side effects together with those which reduce the side effects is routinely practiced in the art.

5. **Claims 1-6, 10 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ko (5,851,528) by itself or in combination with De Lacharriere (5,744,156), in further combination with applicant's statements of prior art.**

Neither Ko nor De Lacharriere teach the use of cremophor as a drug or as a carrier. The references do not also teach that cremophors or liposomes cause compliment activation. Applicant on pages 5 and 6 cite various references which show that cremophors and liposomes cause compliment activation. Since the reference of Ko teaches that the inhibitors of complement activation for the treatment of conditions resulting from

complement activation, it would have been obvious to one of ordinary skill in the art to use Ko's inhibitors for cremophor induced side effects since one would expect similar results irrespective of what causes the complement activation.

This rejection is maintained since applicant provides no specific arguments.

6. **Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).**

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. **Any inquiry concerning this communication or earlier communications from the examiner should be directed to *G.S. Kishore* whose telephone number is (703) 308-2440.**

The examiner can normally be reached on Monday-Thursday from 6:30 A.M. to 4:00 P.M. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, T.K. Page, can be reached on (703)308-2927. The fax phone number for this Group is (703)305-3592.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [thurman.page@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-1235.

Gollamudi S. Kishore, Ph. D

Primary Examiner

Group 1600

gsk

March 12, 2001